

REMARKS

This Amendment and Response is submitted in reply to the Office Action dated September 18, 2008. Reconsideration is respectfully requested of the above identified application in view of the amendments above and remarks following.

Applicants thank the Examiner for the courtesies extended to Applicant's representatives during an in-person interview on August 28, 2008. The substance of these Remarks is substantially in concert with the discussion at the interview.

Claims 1-42 were pending in this application. Claims 21-26, 32-35, and 41-42 were withdrawn. For ease of handling, claims 1-40 and 42 have been cancelled and replaced by new claims 43-66, meaning that claims 41 and 43-66 are currently pending for the Examiner's review and consideration. New claims 57-63 and 66, as well as amended claim 41, are withdrawn as directed to a non-elected invention. Support is found in the originally filed claims. No new matter has been added.

Support for metals Ni, Fe, Co, Pd, or Pt can be found, *e.g.*, in original claim 15-16.

Support for "bonded to M" can be found, *e.g.*, in Summary section on page 2.

Support for the specific set of substituents for R¹, R², R³ and R⁴ can be found, *e.g.*, in the Table at pages 9-11 and the formulas at pages 11-12.

Support for the specific set of bridging groups for Y can be found, *e.g.*, in original claims 19 and 17.

Support for the specific set of substituents for X can be found, *e.g.*, in the Table at pages 9-11.

Support for the activity of moles of ethylene per mole M per hour can be found, *e.g.*, at original claim 22.

Support for new claims 44-45 can be found, *e.g.*, at original claim 8.

Support for new claim 46 can be found, *e.g.*, at original claim 20.

Support for new claim 47 can be found, *e.g.*, at original claim 18.

Support for new claim 48 can be found, *e.g.*, at original claim 12.

Support for new claim 49 can be found, *e.g.*, at page 16, lines 1-4.

Support for new claims 50-53 can be found, *e.g.*, at page 15, line 5 through page 16, line 7.

Support for new claim 54 can be found, e.g., at page 19, line 3.

Support for new claims 55-56 can be found, e.g., at original claims 3-4.

Support for new claim 57 can be found, e.g., at original claim 22.

Support for new claims 58-61 can be found, e.g., at original claims 23-26.

Support for new claim 62 can be found, e.g., at original claim 3.

Support for new claims 63-64 can be found, e.g., at page 23, line 8.

Support for new claims 65-66 can be found, e.g., at page 23, lines 4-6.

Restriction Requirement / Rejoinder

Applicant notes that certain claims have been withdrawn due to a restriction requirement. Applicant requests rejoinder of the withdrawn claims under M.P.E.P. § 821.04(b), upon indication of allowability. Applicant notes that, under M.P.E.P. § 821.04(b), if product claims are found allowable, then "... withdrawn process claims which depend from or otherwise require all the limitations of an allowable product claim will be considered for rejoinder." Applicant respectfully requests rejoinder of claims 57-63 and 66.

Claim Rejections Under 35 U.S.C. § 103 (a)

Claims 1-20, 27-31, and 36-39 have been rejected under 35 U.S.C. § 103(a) as being obvious over Sumi (US 6,323,353), in view of Baardman (US 5,658,982), in further view of Qian (*Synthesis and Polymerization behavior of Various Substituted Half-Sandwich Titanium Complexes Cp'TiCl₂(OR*) as Catalysts for Syndiotactic Polystyrene*, J. Mol. Cat. 208, 2004, 45-54).

Claims 1-20, 27-31, and 36-39 have been rejected under 35 U.S.C. § 103 (a) as being obvious over Buchwald (US 6,307,087), in view of Baardman, in further view of Qian.

Claims 1-20, 27-31, and 36-39 have been rejected under 35 U.S.C. § 103(a) as being obvious over Zhang (US 6,525,210), in view of Baardman, in further view of Qian.

Claim 40 has been rejected under 35 U.S.C. § 103(a) as being obvious over any of Sumi, Buchwald, or Zhang, in view of Baardman, in further view of Piekarski (US 3,991,259).

With regard to Sumi, Buchwald, and Zhang, each in view of Baardman, and further in further view of Qian or Piekarski, the Examiner admits that activators are not present in the

primary references of Sumi, Buchwald, and Zhang but then suggests that the use of an activator would be obvious from Baardman, in further view of Qian or Piekarski. Applicant respectfully traverses these rejections.

Sumi, Buchwald, and Zhang have been cited (relatively interchangeably) as disclosing Applicant's claimed catalyst precursor, but do not disclose or suggest Applicant's claimed activator, as acknowledged by the Examiner, *e.g.*, on 3, 4, and 5 of the Office Action, respectively. The Examiner attempts to remedy this deficiency by citing Baardman, which discloses a process for copolymerizing carbon monoxide with an olefin using a catalyst based on a Group VIII metal and a boron hydrocarbyl compound. Because the boron hydrocarbyl compounds disclosed in Baardman include two of Applicant's claimed activators, the Examiner has asserted that it would have been obvious for one of ordinary skill in the art to have combined Baardman with Sumi, Buchwald, and/or Zhang. Further, the Examiner has cited Qian for the proposition that halogen substituents on the metal are interchangeable with hydrocarbyl substituents. The insufficiencies of each of these contentions are addressed by Applicant below, and, where applicable, the proper placing of the burden on Applicants or Examiner is addressed below.

Initially, Applicant respectfully submits that the Examiner has long ignored the amendment to Applicant's preamble regarding the catalyst system claims, in which what had previously been merely recited a catalyst system was amended to recite "[a]n olefin polymerization or oligomerization catalyst system" It has been previously asserted by Applicant that the requirement of the catalyst being an olefin polymerization or oligomerization catalyst, though admittedly in the claim preamble, is a distinction from the cited prior art that should be given patentable weight. There is no evidence that the Examiner has done so.

Indeed, the inclusion of "olefin polymerization or oligomerization" in the preamble of the claim indicates that the olefin polymerization/oligomerization characteristic of the catalyst is a required feature of Applicant's claimed invention. Olefin polymerization or oligomerization names the catalyst system, and, as such, provides context for the system and breathes life into the claim. Applicant is therefore affirmatively relying herein on this characteristic for establishing patentability over the cited prior art, which necessarily transforms any preamble statement into a claim term that should be given its due patentable

weight. See M.P.E.P. § 2111.02, citing *Metabolite Labs., Inc. v. Corp. of Am. Holdings*, 370 F.3d 1354, 1358-62 (Fed. Cir. 2004), and quoting *Catalina Mktg. Int'l. v. Coolsavings.com, Inc.*, 289 F.3d at 808-09 (“[C]lear reliance on the preamble during prosecution to distinguish the claimed invention from the prior art transforms the preamble into a claim limitation....”).

As Applicant has previously noted, all of Sumi, Buchwald, and Zhang disclose catalysts effective in functionalization and/or small molecule chemical reactions,¹ none of which disclose or even suggest olefin polymerization or oligomerization, which is required for the claimed catalyst system. The Examiner seems to disregard this contention of Applicant, basing the rejection of this distinction between the prior art and the currently pending claims either on what he considers “common knowledge” or on his own knowledge about the cross-application of catalytic asymmetric carbon-bond chemistries to repetitive catalytic addition chemistries for oligomerization/polymerization. The details of this knowledge, Applicant notes, are still not of record – only the Examiner’s rejection as speculative regarding Applicant’s assertion that such is the case is on the record, with its only support being that such cross-application is possible. Applicant respectfully submits that, although it is not her burden to affirmatively extinguish any potentiality, this point has been re-affirmed in the Rule 132 Declaration of Jo Ann Marie Canich (“the Canich Declaration”). See paragraphs 5-6. Applicant also respectfully submits that this Declaration has not been given its due weight. If the Examiner wishes to contest the validity of statements made in this Declaration, it is proper that he do more than offer mere Examiner argument or conclusory statements to do so – he must take Official Notice, cite published prior art contradicting this sworn testimony, or offer contradictory sworn testimony based on clear scientific reasoning (e.g., in the form of a declaration or affidavit), if he wishes to cast sufficient doubt over its validity to put the burden of proof back on Applicant. See *In re Zurko*, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) (“[T]he Board [or an examiner] cannot simply reach conclusions based on its own understanding or experience or on its assessment of what would be basic knowledge or common sense. [T]he Board [or an

¹ (i) asymmetric hydrogenation, isomerization, and/or hydrosilylation, as in column 1, lines 40-49 of Sumi; (ii) aryl amination, Suzuki couplings, and/or ketone alpha-arylations, as in Figure 1 and column 1, lines 63-65 of Buchwald; and (iii) asymmetric hydrogenation of imines, asymmetric hydride transfer reactions, hydrosilylation, hydroboration, hydrovinylolation, hydroformylation, allylic alkylation, cyclopropanation, Diels-Alder reaction, Heck reaction, isomerization, Aldol reaction, Michael addition, and epoxidation reactions, as in the Abstract of Zhang.

examiner] must point to some concrete evidence in the record in support of these findings [to satisfy the substantial evidence test]. If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. The Board [or an examiner] cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies.”) (Emphasis added); *see also* M.P.E.P. § 2144.03.

On a related issue, Applicant has challenged the Examiner’s basic assertion that the mere disclosure in Sumi, Buchwald, and/or Zhang of a series catalyst ligands and metals necessarily means that they must coordinate and/or operate in the same way as Applicant’s claimed catalyst-metal complex. Applicant has shown, not only based on scientific arguments, but buttressed with disclosure in published prior art documents, how such complexation between metal and ligand in the cited prior art is not INHERENT. Again, Applicant has made these points most recently in the Canich Declaration. *See, e.g.*, paragraph 5. The Examiner has also, again, only countered this sworn testimony with an insistence that Applicant must affirmatively prove that the prior art metals and ligand necessarily complex differently before he will entertain non-obviousness. *See* pages 11-12 of the most recent Office Action. This is undeniably the wrong standard. Applicant notes that the burden of proving unpatentability lies with the Examiner – the burden of proving patentability does not lie with Applicant. *See, e.g.*, the preamble of 35 U.S.C. § 102 (“A person shall be entitled to a patent unless –”) (Emphases added). Furthermore, the scientific rationales offered in the Canich Declaration are not mere “opinion,” as suggested by the Examiner, but are, in each instance, backed up with either disclosure from the case or published prior art. While the Examiner’s stick-to-itiveness is admirable, he must give the sworn testimony in the Canich Declaration its due weight as evidence in the record. Again, his rebuttal options in this case are well documented above – Official Notice of common knowledge, cited prior art, or an affidavit of his own knowledge.

The Examiner also dismisses Applicant’s reference to Fox (Fox *et al.*, *JACS*, 2000, 122, 1360) in paragraph 5 of the Canich Declaration as “unpersuasive,” as the Examiner indicates that “Fox was not used in the rejections.” *See* page 12 of the most recent Office Action. Applicant respectfully reminds the Examiner that he is not the only one who can cite

prior art to support his theories. Applicant's citation of Fox was specifically to rebut the Examiner's erroneous assertion regarding the inherency of the metal-ligand complexation/reaction mechanism. The fact that Fox was not cited by the Examiner in no way diminishes its value as relevant prior art, of which the Examiner must take notice. Indeed, even if the Examiner now finds a publication indicating that a similar metal and a similar ligand to those claimed by Applicant could operate by the same mechanism, Applicant has provided evidence on the record of lack of inherency, so that the Examiner can no longer merely assume that $A+B$ must equal C . Now, the Examiner's burden of proving obviousness has increased, and, because of the existence of Fox, not only must the combination of claimed elements exist, but there must have been a motivation for one of ordinary skill in the art to have used that combination in the particular way despite Fox's teaching away.

Nevertheless, in order to further distinguish the claimed invention from the cited prior art, Applicant has included in sole independent claim 43 the additional feature that the olefin polymerization or oligomerization catalyst system exhibits an activity that exceeds 8000 moles of ethylene per mole transition metal per hour. Certainly, this feature is found nowhere in the cited prior art and could even serve as an independent point of distinction.

Baardman, while admittedly disclosing a catalyst composition for a polymerization system, does not remedy the deficiencies of Sumi, Buchwald, and/or Zhang, and even teaches one of ordinary skill in the art away from the claimed invention in many respects. Baardman discloses a catalyst composition comprising a Group VIII metal and a boron hydrocarbyl compound. Applicant concedes that Baardman's disclosed metal component and boron hydrocarbyl component fall within Applicant's claim, but that is where the similarities end.

Baardman teaches that the Group VIII metal complexes with a monodentate or bidentate ligand (preferably bidentate), with each coordinating heteroatom (dentate group) containing P, N, or S. *See* column 3, lines 11-22. Baardman also teaches that preferred bidentate ligands have the formula $R^1R^2M^1-R-M^2R^3R^4$, where R^1-R^4 are independently unsubstituted or polar-substituted hydrocarbyls having up to 10 carbons, R is a bivalent C_{2+} organic bridging group, and M^1 and M^2 are each independently P, As, or Sb. *See Id.* at lines 25-35. All of the Examples in Baardman also teach bisphosphinyl ligands. Other "suitable" bidentate ligands have two nitrogen dentate groups (column 4, lines 8-23) or two sulfur

dentate groups (column 4, lines 24-34). Baardman does not teach bidentate ligands having one phosphorus and one nitrogen heteroatom, as required by the instantly claimed invention.

As a result, even if one of ordinary skill in the art would have been motivated to combine Baardman with Sumi, Buchwald, and/or Zhang (a point with which Applicant takes issue separately below), such a combination would teach one of ordinary skill in the art only to use the bisphosphinyl or bisamino ligands with the boron hydrocarbyl compound, and not to use a phosphoaminyl ligand with such an activator. Thus, because the combination of Baardman and Sumi, Buchwald, and/or Zhang counsels against such a combination, Applicant respectfully submits that the only reason to continue with such a rejection must be based on Applicant's own specification, resulting in improper hindsight reconstruction, which is forbidden. *See* M.P.E.P. § 2145(X)(A). The Examiner has stated, in the previous Office Action, that "any judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning." However, Applicant respectfully submits that an examiner, having a Ph.D. in inorganic catalyst chemistry, would not be one of ordinary skill in the art, for the purposes of this determination, and the Examiner in this case must limit himself to that which can be proven on the record and not that which his extensive experience and/or intuition in small molecule catalysis would suggest.

In addition, also as mentioned hereinabove, Baardman teaches the use of the catalyst in a copolymerization of an olefin with carbon monoxide, which Applicant has previously maintained exhibits different reaction requirements than other olefin (co)polymerizations. *See* the Canich Declaration at page 7, paragraphs 8-9. Indeed, inventor Canich has made of record a publication (to which she contributed) involving details of carbon monoxide-olefin copolymerizations, so that the record can reflect not only her experience in that area but also her appreciation of why (co)polymerizations involving olefins only (please note claims 65-66) or olefins and non-polar monomers are different from what is disclosed in Baardman. These particulars are scientifically specific and detail why one of ordinary skill in the art, even if he had somehow combined Baardman with Sumi, Buchwald, and/or Zhang, would not have been motivated to apply this combination to (co)polymerizations having such disparate reaction conditions to Baardman. These particulars, and the conclusion flowing therefrom, remain on the record, contested only by the Examiner's logic, which seems to be that anything within the realm of catalysis and polymerization is "obvious to try" and that, once a

person of ordinary skill in the art has decided to “try,” all other things obviously flow therefrom. Applicant cautions the Examiner that such logic is specifically forbidden not only by the rules admonishing improper hindsight reconstruction but also by controlling precedent (particularly in situations where more than a relatively small number of relatively predictable results exist; *see KSR Int’l. Co. v. Teleflex Inc.*, 127 S.Ct 1727, 1740-42 (U.S. 2007)). Because Applicant has offered ample evidence of the relatively high number of variables, as well as the unpredictability of the variables to the results and the inapplicability of the cited prior art to the predictability of the results obtained by modifying the variables, Applicant respectfully submits that the obvious rejections cannot be maintained.

Furthermore, Baardman specifically mentions advantageous use during the olefin-CO copolymerization of a protic compound, *e.g.*, for “maintaining the polymerization rate at the initial level.” *See* Baardman at column 5, lines 11-14. While the use of protic compounds may be favorable for copolymerizations of olefins with carbon monoxide (where, *e.g.*, the carbon-oxygen radical chain end may be stabilized by such protic compounds), on the contrary, such protic solvents can serve as poisons to certain olefin polymerizations, such as those containing only olefin monomers and comonomers. While Applicants have submitted prior attorney argument and have addressed this point in the Canich Declaration, the Examiner has indicated that the Canich Declaration contains no reasons or teaching as to why (*see* Office Action at page 11). Indeed, in paragraph 8, the first full sentence on page 7 of the Canich Declaration, it is stated: “For olefin polymerization or oligomerization, a protic diluent would be expected to act as a chain termination agent forming a saturated oligomer or polymer with a saturated end-group.” (Emphasis added). While a chain termination agent may not be considered a “catalyst poison,” it certainly “poisons” the oligomerization or polymerization reaction from the standpoint of obtaining a desired product. This should really be sufficient reasoning. Even if not, Applicant now has claims (63-64) which specifically recite an aprotic organic liquid, from which the disclosure of Baardman thus teaches away.

As noted above, the additional required feature that the olefin polymerization or oligomerization catalyst system exhibits an activity that exceeds 8000 moles of ethylene per mole transition metal per hour is also not taught or suggested by Baardman. Even if one of ordinary skill in the art were to somehow ignore the preference in Baardman for the bis-

ligands (diphosphinyl, diamino, etc.) of Sumi, Buchwald, and/or Zhang in combination with the boron hydrocarbyl compound, the claimed activity levels, which are nowhere disclosed or suggested in any of the prior art, should distinguish Applicant's claims. Indeed, Applicant respectfully submits that these activities in olefin oligomerizations/polymerizations are surprising and unexpected in view of the prior art.

Qian was cited for the proposition that halogen groups and hydrocarbyl groups are interchangeable in catalyst complexes. However, Applicants note that Qian teaches only that alkoxy groups, and not hydrocarbyl groups, can be interchangeably substituted for halogens – this makes sense, because halogens and alkoxides, as relatively labile groups, both have relatively stable ionic species, which is not the case with hydrocarbyl groups, such as alkyl groups, like methyls. Applicant's claimed hydrocarbyl-metal bonds are organometallic (*i.e.*, they have a carbon-metal bond; see pages 3-4 of the originally-filed specification), whereas Qian only teaches replacing halogen-metal bonds with alkoxy-metal bonds. The Examiner seems to be confusing the hydrocarbyl R₁ substituents on the Cp ring complexed with the transition metal (Ti) with the alkoxy (fencholate/mentholate) R₂ substituents directly connected to the transition metal. See Qian Figure 1, page 46; see also the sentence spanning pages 45-46.

Furthermore, even if Qian taught or suggested what the Examiner asserts, Qian does not remedy the deficiencies of Baardman, Sumi, Buchwald, and/or Zhang. Qian does not teach or suggest combinations of activators with metal-phosphoamine ligand complexes (titanium is not even one of Applicant's claimed M substituents) and does not disclose or suggest the recited activity, both of which are required in all of the instant claims. Further, Qian does not disclose or suggest oligomerization or polymerization of ethylene, propylene, and/or 1-butene, as required by claims 65-66. The Examiner has offered no basis, and Applicant can also find no basis, for combination of a concept applicable to titanium-cyclopentadienyl catalytic complexes disclosed for making polystyrene (Qian) with late transition metal-diphosphine (or diamino or dithio) ligand complexes disclosed for making olefin-CO copolymers (Baardman) and/or with late transition metal-diphosphine/phosphoamine ligand complexes disclosed for functionalized compounds or asymmetrically substituted small molecules (Sumi, Buchwald, and/or Zhang). Indeed, Applicant's offering of scientific rationale counseling against Qian's combination with the

other cited prior art references (inapplicability, incompatibility, etc.) were made in the Canich Declaration (*see* paragraph 10).² As such, even the combination of Qian, Baardman, and Sumi, Buchwald, or Zhang does not disclose or suggest all the elements of the currently pending claims and thus does not render obvious the claimed invention.

Pickarski was cited for the proposition that catalytic activity is increased by deposition on a support. While Applicants concede that Pickarski discloses such a concept, it is disclosed only for Ziegler-Natta or Wacker catalyst systems (and early transition metals, at that) and not for the activated late transition metal-phosphoamine ligand complexes of the instant claims. As such, Applicant questions the motivation of one of ordinary skill in the art to look to combine this concept with the disclosures of Qian, Baardman, and Sumi, Buchwald, or Zhang, to alter such an unlikely combination in the ways suggested by the Examiner, and to reasonably expect success of such an unlikely combination of elements in attaining the claimed invention.

Again, Applicant only mentions in passing what has been discussed in detail above – that there are so many differences between the system disclosed in Pickarski and not only Applicant's claimed system but also the prior art systems cited by the Examiner, such that one of ordinary skill in the art would not have been motivated to combine/alter Pickarski with the remainder of the cited prior art (or at least the Examiner has not convincingly rebutted Applicant's scientific explanations why such a combination/alteration is contrary to the logic and disclosures Applicant offered as sworn testimony). Further, Applicant respectfully submits that, even if the disclosure of Pickarski could be generalized to any catalytic reaction or any polymerization or oligomerization reaction as the Examiner has suggested, it still does

² Contrary to the Examiner's assumption on page 12 of the most recent Office Action, Applicant has NOT admitted that halogen and hydrocarbyl groups are interchangeable in some circumstances. Indeed, Applicant needs not so admit, and Applicant officially states herein that Applicant admits nothing other than that which is specifically admitted or conceded during prosecution. In this case, Applicant needs only to cast doubt on the obviousness of halogen-hydrocarbyl interchangeability in all catalytic systems to shift the burden back to the Examiner to prove its obviousness with this claimed system/process. Applicant has fulfilled her burden via the evidence and scientific rationale offered in the Canich Declaration. Again, the Examiner has made so many "obvious to try" arguments with respect to alterations of the prior art catalyst systems that Applicant seriously questions how they cannot collectively destroy the obviousness logic set forth in KSR. Furthermore, Applicant needs not show surprising and unexpected results for each aspect of her invention over each step of the prior art nor for each "obvious to try" alteration of said cited prior art by the Examiner along the way. There are many differences that distinguish the claimed invention from the cited prior art, the least of which being Applicant's claim requirement of a certain catalytic activity, as well as the statements herein regarding the surprising and unexpected nature thereof.

not remedy the deficiencies of Qian, Baardman, Sumi, Buchwald, and/or Zhang, in that at least the surprising and unexpected nature of the claimed catalytic activity is neither disclosed nor suggested in any of the cited prior art.

Generally, Applicant respectfully submits that the Examiner cannot merely cite portions of references and generalize their applicability to cobble together a rejection asserting that a selective combination of such scattered elements (or, even worse, a combination of such scattered elements and some elusive knowledge of a skilled artisan) without a motivation or suggestion for one of ordinary skill in the art to do so. The number of elements of the cited prior art that one of ordinary skill in the art would have had to ignore, alter, generalize, or reason away in contradiction of the references themselves in order to attain the claimed invention seems to be more than the number of elements from the cited prior art on which the Examiner relies to render obvious the claimed invention. While the Examiner has repeatedly asserted that Applicant has looked at the relevant science in a vacuum, Applicant, with all do respect, asserts that the Examiner has done the same with Applicant's reasoning and sworn testimony. Applicant also asserts that, even if such a combination of elements from the prior art were somehow supported by scientific rationale on the record, Applicant's sworn testimony offering scientific rationale to rebut the Examiner's rationale is not given due weight nor appropriately rebutted on the record.

Also generally, Applicant respectfully submits that informal websites or undated publications, such as Wikipedia, which is not based on actual knowledge at the time of invention/filing, cannot satisfy to buttress an argument based on common sense or common knowledge. Indeed, as Applicant mentioned above, even though the Examiner can find one instance where some result was achieved with a specific change in a certain variable, this does not necessarily mean that such a result will occur in every system. When Applicant offers logic, undisputed by the Examiner, that a certain result was not achieved inherently, the Examiner's assumption based on the generality falls apart, and more evidence is needed on the record of the obviousness of such a variable alteration to achieve a specified result. While Applicant is willing to entertain the possibility that some alterations of the prior art, under certain circumstances, might be "obvious to try," the Examiner cannot summarily or conclusorily assert that a vast array of variable modifications and conditions that might be individually "obvious to try" are necessarily collectively obvious from the combination of the

cited prior art and common knowledge of one of ordinary skill in the art. Certainly, this cannot be asserted by mere Examiner argument, when Applicants have offered scientific rationale and sworn testimony to the contrary, *e.g.*, in the Canich Declaration.

Furthermore, when Applicant remarks on some inconsistency between a single reference and the claimed invention, Applicant is not, as the Examiner mistakenly asserts on page 8 of the most recent Office Action, arguing against a reference individually. Applicant's notation of the inconsistency not only stands alone in showing the inapplicability of the individual reference to the claimed invention but may also, as applicable, indicate an inconsistency in combination with other prior art references cited ostensibly for establishing other elements. Applicant respectfully submits that she need not detail every inconsistency individually and in combination in order to fully reply to, or rebut, the Examiner's prior assertions for compliance with 37 C.F.R. §§ 1.111-1.116. To the extent that the Examiner has questions about the breadth of applicability of Applicant's statement(s) on an individual piece of prior art, Applicant respectfully requests that the Examiner contact the undersigned attorney to clarify said statement(s) before assuming their most narrow interpretation.

For any one or more of the foregoing reasons, Applicant respectfully requests that the obviousness rejections be reconsidered and withdrawn.

Double Patenting

Claims 1-20, 27-31, and 36-40 have been provisionally rejected under the judicially-created doctrine of obvious-type double patenting (ODP) over claims 2-6 and 9-17 of U.S. Serial No. 10/693,584 ("the '584 application"), filed October 24, 2003. Applicant respectfully disagrees. First, Applicant notes that a similar rejection was made in the '584 application over the instant application. Applicant further notes that, with regard to provisional ODP rejections, if the applications have the same effective filing date (which the '584 application and the instant application do) according to M.P.E.P. § 804 (I)(B)(1), "the examiner should determine which application claims the base invention and which application claims the improvement (added limitations). The ODP rejection in the base application can be withdrawn without a terminal disclaimer...." (Emphasis added).

Applicant submits that the instant Application is the base application for purposes of M.P.E.P. § 804 (I)(B)(1) and that the ODP rejection in the instant application should be withdrawn.

In the event the Examiner does not withdraw the ODP rejection, Applicant respectfully requests that the Examiner make the determination of which application is the “base” application and which application is the “improvement” application, as required by the M.P.E.P.

The Examiner's response to Applicant's previous submissions was to object that “Applicants have provided no evidence or reasoning that the instant application is the base application.” See page 11, paragraph 3, of the most recent Office Action. Applicant respectfully notes that M.P.E.P. § 804 (I)(B)(1) requires that “the examiner should determine which application claims the base invention....” (Emphasis added). As a courtesy, Applicant has previously (and currently) suggested that the instant application is the base application. Further, M.P.E.P. § 804 (I)(B)(1) does not require evidence and reasoning by the Applicant for such a determination.

For the foregoing reasons, Applicant requests that the ODP rejection be reconsidered and withdrawn.

CONCLUSION

Applicants have made an earnest effort to place their application in proper form and to establish the patentability of their claimed invention over the applied prior art. Wherefore, reconsideration of this application, entry of the amendments, withdrawal of the art, rejoinder of the withdrawn claims, and allowance of the amended claims herein are all respectfully requested.

Please charge any deficiency in fees or credit any overpayments during the entire pendency of this case to Deposit Account No. 05-1712. Please also charge any petition fees, including fees for extensions of time necessary for the pendency of this case or copendency of this application with another application at any time to Deposit Account No. 05-1712.

Any comments or questions concerning the application can be directed to the undersigned at the telephone number given below.

Respectfully submitted,

Date: November 11, 2008

/Catherine L. Bell/

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